

KULAYEV, Yu.F., inzh. (g.Chelyabinsk)

Use of electric traction in local operations. Zhel.dor.transp. 42
no.12:63-64 D '60. (MIRA 13:12)
(Chelyabinsk Province—Electric railroads)

KULAYEV, Yu. F., inzh. (Sverdlovsk)

Establishment of electric power expenditure standards on the
traction of mixed and transfer trains. Elek. i tepl. tiaga 6
no.9:11-12 S '62. (MIRA 15:10)

(Electric railroads--Current supply)

KULAYEV, Yu.F., inzh.

Effectiveness of the use of electric locomotives in the local operations
of the Ural railroads. Trudy TSNII MPS no.266;65-102 '63.

(MIRA 17:2)

KHIL'CHENKO, V.P., inzh. (Sverdlovsk); KULAKOV, Ia.P., inzh. (Sverdlovsk)

Distribution of the stations for the preparation of cars for
loading. Zhel. dvt. transp. 47 no.1:50-55 Ja '65. (MIRA 18;3)

PERIODICAL ABSTRACTS

Sub.: USSR/Engineering

AID 4188 - P

KULAYEVA, A. F.

ATSETILENU-KISLORODNAYA SVARKA LATUNI L62 PRISADOCHNYM MATERIALOM
LK62-05 (Oxy-Acetylene Welding of L62 Brass with the LK62-05 Welding
Admixtures). Svarochnoye proizvodstvo, no. 1, Ja 1956: 30-31.

The author describes the experience with this method of welding at the Sumy Machine-Building Plant im. Frunze, where it was adapted in the welding of rotors for the centrifugal machines manufactured there. The practice effected great savings of time (reduction was achieved from 52.72 norm/hours for one piece production to 8.49 norm/hours) and significant improvements in the quality and strength of the welding. Two macrostructure and microstructure pictures of a seam, 1 table and sketch.

"APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R000927330001-6

BONDAREV, A.A.; KULAYEVA, A.F.; MIKHAYLICHENKO, M.D.

Advanced methods for machining instrument parts. Avtom. i prib. no. 2:
63-66 Ap-Je '65.
(MIRA 18;7)

APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R000927330001-6"

GANELIN, Georgiy Zalmanovich; KULAYEVA, Inna Georgiyevna; IVANOV,
B.N., red.

[Multiple connection switches] Perekliuchateli parallel'-
nykh soedinenii (PPS). Leningrad, 1965. 21 p.
(MIRA 18:10)

DOVNAR-ZAPOL'SKAYA, Nadezhda Markianovna; KOROLEVA, Nadezhda Sergeyevna;
KULAYEVA, Lyudmila Iosifovna; LUPANDINA, Ol'ga Sergeyevna;
NEMILOVA, Tat'yana Konstantinovna [deceased]; OSTROVSKAYA, Al'ma
Yul'yevna, dotsent, red.; GORDEYEVA, L.N., red.; YERMAKOV, M.S.,
tekhn.red.

[German-Russian mechanical and mathematical dictionary] Nemetsko-
russkii mekhaniko-matematicheskii slovar'. Pod red. IU.A.Ostrovskoi.
Moskva, Izd-vo Mosk.univ., 1960. 236 p. (MIRA 13:9)
(German language--Dictionaries--Russian)
(Mathematics--Dictionaries) (Mechanics--Dictionaries)

GRABENKO, A.D.; PEL'KIS, P.S.; KULAYEVA, L.N.

Substituted arylamides of dithioacids. Part 4: Preparation
of amides of substituted arylamides of dithiomalonic acid. Zhur. ob.
khim. 32 no.7:2248-2254 Jl '62. (MIRA 15:7)

1. Institut organicheskoy khimii AN USSR.
(Amides) (Malonic acid)

ACC NR: AP6023579

SOURCE CODE: UR/0409/66/000/003,0364/0367

AUTHOR: Grabenko, A. D.; Kulayeva, L. N.; Pel'kis, P. S.

ORG: Institute of Organic Chemistry, Academy of Sciences, UkrSSR, Kiev
(Institut organicheskoy khimii Akademii nauk UkrSSR)TITLE: Investigation of substituted amides of thiocarboxylic acids
VII. Cyclization of arylamides of mono- and dithiomalonic acid
derivatives

SOURCE: Khimiya heterotsiklicheskikh soedineniy, no. 3, 1966, 364-367

TOPIC TAGS: thiazole, heterocyclic ^{base} compound, condensation reaction,
cyclization, malic acid

ABSTRACT:

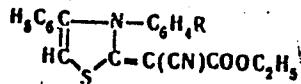
The purpose of this work was the search for new physiologically active derivatives of thiazole. The ethyl esters of arylamides of monothiocyanomalonic acid react with ω -bromoacetophenone in absolute ethanol to yield 2-carbethoxycyanomethylene-3-aryl-4-phenylthiazoles. Unlike the starting

Card 1/5

UDC: 547.789.5.542.952.52

ACC NR: AP6023579

Table 1.



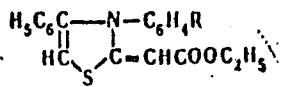
M	R	T. mp., °C	Formula	Found S, %	Calculated S, %	Yield, %
1	H	>240	C ₁₀ H ₁₁ O ₂ N ₂ S	9.23; 9.28	9.19	
2	p-CH ₃	207	C ₁₁ H ₁₂ O ₂ N ₂ S	8.70; 8.65	8.86	94
3	p-CH ₃ O	188	C ₁₁ H ₁₂ O ₃ N ₂ S	8.79; 8.87	8.47	90
4	p-Cl	210	C ₁₀ H ₁₀ O ₂ N ₂ S	8.42; 8.44	8.36	81
5	p-NH ₂ SO ₃	>240	C ₁₀ H ₁₁ O ₂ N ₂ S ⁻	14.86; 14.90	14.98	85
6	p-C ₆ H ₅ OOC	218	C ₁₁ H ₁₀ O ₃ N ₂ S	7.63; 7.51	7.62	58
7	p-NO ₂	180	C ₁₀ H ₁₁ O ₂ N ₂ S			91
						82

amide malonic esters, the resultant 2-carbethoxycyanomethylene derivatives of thiazole resist saponification with aqueous or alcoholic KOH or with 60% sulfuric acid. Reaction of diethyl esters of arylamides of thiocarboxymalonic acid with ω -bromoacetophenone yielded 2-carbethoxy-methylene-3-aryl-4-phenylthiazoles. When the reaction time on a steam

Card 2/5

ACC NR: AP6023579

Table 2.



M	R	T. MP., °C	Formula	Found s. %	Calculated s. %	Yield, %
1	H	203	C ₁₉ H ₁₇ O ₃ NS	9.77; 9.62	9.90	14
2	p-C ₆ H ₅ O	144	C ₂₁ H ₁₉ O ₃ NS	8.54; 8.53	8.72	6
3	p-NO ₂	162-163	C ₁₉ H ₁₆ O ₄ N ₂ S	8.59; 8.54	8.69	11
4	p-NH ₂ SO ₂	Does not melt	C ₁₉ H ₁₆ O ₄ N ₂ S ₂	16.29; 16.32	15.92	10

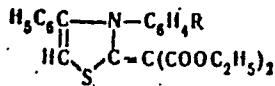
bath is shortened, or the reaction mixture is left to stand overnight at room temperature, 2-dicarbethoxymethylene-3-aryl-4-phenylthiazoles are formed. On heating for 3-4 hours, loss of a carbethoxy group results in formation of 2-carbethoxymethylene-3-aryl-4-phenylthiazoles:

Card 3/5

ACC NR: AP6023579

Heating of diarylamides of dithiomalonic acid with ω -bromoacetophenone yields exclusively monobromides of 3,3'-diaryl-4,4'-diphenyl-2-methine-dithiazoles.

Table 3.

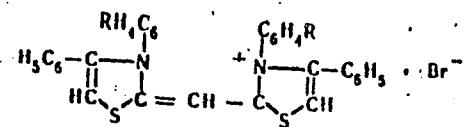


M.	R	T. mp., °C	Formula	Found s. %	Calculated s. %	Yield, %
1	H	162	C ₂₂ H ₁₁ O ₄ NS	7.90; 7.97	8.10	88
2	p-CH ₃	160	C ₂₃ H ₁₃ O ₄ NS	7.95; 8.02	7.82	66
3	p-C ₆ H ₅ O	118	C ₂₁ H ₁₃ O ₄ NS	7.52; 7.37	7.28	85
4	p-Br	168-169	C ₂₂ H ₁₀ O ₄ NSBr	6.44; 6.36	6.75	70
5	p-NO ₂	205-206	C ₂₀ H ₁₀ O ₄ N ₂ S	7.39; 7.47	7.27	67

Card 4/5

ACC NR: AP6023579

Table 4.



No.	R	T. mp., °C	Formula	Found S, %	Calculated S, %	Yield, %
1	H	Does not melt	C ₁₁ H ₁₂ N ₂ S ₂ Br	10.83; 10.70	11.25	85
2	p-CH ₃ O	"	C ₁₂ H ₁₄ O ₂ N ₂ S ₂ Br	9.96; 10.02	10.17	83
3	o-C ₆ H ₄ O	"	C ₁₂ H ₁₂ O ₂ N ₂ S ₂ Br	9.94; 9.87	9.77	78
4	p-C ₆ H ₄ O	"	C ₁₂ H ₁₀ O ₂ N ₂ S ₂ Br	9.61; 9.46	9.77	86

Orig. art. has: 4 tables.

[W. A. 50; CBE No. 10]

SUB CODE: 07/ SUBM DATE: 31 Dec 64/ ORIG REF: 004/ OTH REF: 001

Card 5/5

GRABENKO, A. D.; PEL'KIS, P. S.; KULAYEVA, L. N.

Substituted arylamides of dithiocarboxylic acids. Part 5:
Amides of substituted arylamides of phenylazothiomalonic
acid. Zhur. ob. khim. 33 no.1:118-120 '63.

(MIRA 16:1)

1. Institut organicheskoy khimii AN UkrSSR.

(Malonamide) (Substitution(Chemistry))

GRABENKO, A.D.; KULAYEVA, L.N.; PEL'KIS, P.S.

Substituted aryl amides of dithiocarboxylic acids. Part 6: Synthesis
of aryl azo derivatives of monothiomalonic acid aryl amides and
their esters. Zhur. ob. khim. 33 no.7:2227-2231 Jl '63.

1. Institut organicheskoy khimii AN UkrSSR.
(Malonamide) (Azo compounds)

(MIRA 16:8)

KULAYEVA, IV. I.

✓ Processes of mineral formation during service of Dinas in the roof of an electric tin smelter. N. I. Kulacyn, *Ogneupory* 20, 228-33(1955).—Petrographic investigation leads to following conclusions: Dinas acquires a definite zonality with presence of tridymite and little changed zones. Absence of cristobalite zone indicates lighter temp. conditions compared with Dinas from the roof of an elec. steel smelter. Formation of CaSO_4 in the little changed zone is probably connected with the chem. action of the SiO_2 from the furnace atm. with the pseudowollastonite of the Dinas. The only Sn compnd. present in the reaction layer on the Dinas was SnO_2 . ZnO reacts with the SiO_2 of the brick to form Zn_2SiO_4 . In the reaction layer there forms a glass of complex chem. compn., which includes, in addn. to SiO_2 and alkali, also apparently such components as Al_2O_3 , Fe_2O_3 , TiO_2 , PbO , possibly SnO_2 , and others. Wear of Dinas is rapid.

B. Z. Kanich

KULAYEVA, N.I.

Chemical and mineralogical study of refractory materials after
service performance in tin smelting furnaces. Trudy IGEM no.30:
106-123 '58. (MIRA 12:10)

(Refractory materials)

USSR/Plant Physiology - Respiration and Metabolism.

I.

Abs Jour : Ref Zhur - Biol., No 21, 1958, 95627

Author : Kursanov, A.L., Kulayeva, O.N.

Inst : -
Title : Metabolism of Organic Acids in the Roots of Cucurbita L.

Orig Pub : Fiziol. rasteniy, 1957, 4, No 4, 322-331

Abstract : In an ether extract of the roots and in the lymph of young plants of the Mozoleyevskaya variety of Cucurbita L., which were raised in a full nutrient mixture and in solutions without P, the organic acids and ketoacids were determined by paper chromatography. Root fixation of CO₂ was studied by means of calculating the radioactivity of an alcohol extract after absorption of carbonate by the roots (0.005 n. of NaHCO₃¹⁴O, with activity of 204 curies in 300 ml). The radioactivity of each separate organic acid was determined after their chromatographic division. On the basis of the results obtained, the authors conclude that the

Card 1/3

- 10 -

USSR/Plant Physiology - Respiration and Metabolism.

I.

Abs Jour : Ref Zhur - Biol., No 21, 1958, 95627

the roots into the organs above ground. The work was carried out at the Institute of Plant Physiology AS USSR. Bibliography, 53 titles. -- N.P. Karobleva

Card 3/3

USSR / Plant Physiology. Mineral Nutrition.

I.2

Abs Jour : Ref Zhur . Bio..., No 22, 1958, No 99925

Author : Kul'yanov, O. N.; Silina, Ye. I.; and Kursakov, A. L.

Inst : Institute of Plant Physiology, AS USSR

Title : Ways of Primary Assimilation of Ammoniacal Nitrogen in
the Roots of Pumpkin.

Craig Pub : Fiziol. Rasteniy, 4, No 6, 520-528, 1957

Abstract : In the Institute of Physiology, Academy of Sciences USSR, plants were grown in aqueous cultures on complete nutrient mixture, nutrient mixture without P at the beginning of experiment but with a short-time P nutrition at the end of the experiment, and nutrient mixture without P throughout the whole experiment. The method of chromatography of paper was used to investigate the composition of free amino acids in the roots and juice of pumpkin. Upon feeding of plants

Card 1/2

USSR / Plant Physiology. Mineral Nutrition.

I-2

Abs Jour : Ref Zhur . Biol., No 22, 1958, No 99223

with NaHCO_3^{14} through roots, Cl^4 was detected in the composition of root amino acids, which indicates the synthesis of these acids directly in the roots. In the roots there predominated alanine, γ -aminobutyric acid, and glutamine; altogether, 18 amino acids were detected. The amino acid composition of the roots is similar to that of the juice. The principal transport forms of NH_2 groups in the pumpkin were found to be alanine, glutamine and γ -aminobutyric acid. The phosphorus starvation caused an acute derangement of the nitrogen metabolism in the roots of pumpkin - there occurred a decrease in the assimilation of ammonical N by the roots, synthesis of a number of amino acids, and protein formation, and there appeared unidentified substances with guanidino grouping and allantoin, i. e., compounds with a high content of N in the molecule, the accumulation of which is not characteristic of the normal metabolism in the pumpkin. Short-time phosphorus feeding reestablished normally in the plants. Bibl., 19 titles. ... G. V. Usovchenko.

Card 2/2

BORODULINA, F.Z., KULAYEVA, O.N.

Some specific features of the water cycle in oak seedlings on saline soils. Nauch.dokl.vys.shkoly; biol.nauki no.1:162-167 '58 (MIRA 11:8)

1. Predstavlena kafedroy fiziologii rasteniy Moskovskogo gosudarstvennogo universiteta im. M.V. Lomonosova.

(OAK)

(ALKALI LANDS)

(PLANT PHYSIOLOGY)

"APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R000927330001-6

KULAYEVA, O. N., Candidate of Biol Sci (diss) -- "The metabolism of the roots of the melon in connection with the assimilation of ammonia nitrogen". Moscow, 1959.
21 pp (Inst of Plant Physiology im K. A. Timiryazev of the Acad Sci USSR), 110 copies (KL, No 22, 1959, 112)

APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R000927330001-6"

KULAYEVA, O.N.

Impressions of research done at the Physiological Section of
the Botanical Institute in Halle (German Democratic Republic).
Fiziol.rast. 6 no.2:253-254 Mr-Ap '59. (MIRA 12:5)
(Halle--Botanical research)

KULAYEVA, O.N.; VOROB'YEVA, I.P.

Made of action of kinetin on protein synthesis. Fiziol. rast. 9
no.1:106-108 '52. (MIRA 15:3)

I. K.A.Timiriazev Institute of Plant Physiology, U.S.S.R. Academy
of Sciences, Moscow.
(Protein metabolism) (Kinetin)

KULAYEVA, O.N.; SVESHNIKOVA, I.N.; KLYACHKO, N.L.; POPOVA, E.A.

Reduction of the protein-nucleic acid metabolism in severed leaves
during their virescence under the influucence of kinetin. Dokl.
AN SSSR 152 no.6:1475-1478 O '63. (MIRA 16:11)

1. Predstavleno akademikom A.L. Kursanovym.

KULAYEVA, O. N.; SVESHNIKOVA, I. N.

"Kinin-induced restoration of metabolic disturbances of yellow leaves."

report submitted for 10th Intl Botanical Cong, Edinburgh, 3-12 Aug 64.

AS USSR, Moscow.

KURGANOV, A.L.; KULAYEVA, O.N. (Moskva)

Current trends in the development of botany; based on materials
from the 10th International Botanical Congress. Usp. sovr. biol.
59 no.1:3-11 Ja-F '65. (MIRA 18:3)

KURSANOV, A.L.; KULAYEVA, O.N.; SVESHNIKOVA, I.N.; POPOVA, E.A.;
BOLYAKINA, Yu.P.; KLYACHKO, N.L.; VOROB'YEVA, I.P.

Restoration of cellular structures and metabolism in yellow
leaves under the effect of 6-benzylaminopurine. Fiziol. rast.
11 no.5;838-847 S.O '64. (MIRA 17:10)

1. Timiriazev Institute of Plant Physiology, U.S.S.R., Academy
of Sciences, Moscow.

VIPPER, P.B.; KULAYEVA, O.N.

Tenth International Botanical Congress. Izv. AN SSSR. Ser. biol.
no.2:314-318 Mr-Ap '65. (MIRA 18:4)

KLYACHKO, N.L.; KULAYEVA, O.N.

Periodicity of protein synthesis in a wild tobacco leaf. Dokl.
AN SSSR 164 no.1;216-218 S '65. (MIRA 18:9)

1. Institut fiziologii rasteniy im. K.A. Timiryazeva AN SSSR.
Submitted August 27, 1964.

KULAYEVA, O.N.; KLYACHKO, N.L.

Effect of quinines on the protein synthesis in leaves. Dokl.
AN SSSR 164 no.2:458-461 S '65. (MIRA 18:9)

1. Institut fiziologii rasteniy im. K.A. Timiryazeva AN SSSR.
Submitted August 24, 1964.

KULAYEVA, O.N.; POPOVA, E.A.

Quantitative determination of nucleic acids in plant leaves.
Fiziol. rast. 12 no.3:558-564 Mysje '65. (MIRA 18:1C)

I. Institut fiziologii rasteniy imeni K.D. Timiryazeva AN SSSR,
Moskva.

KULAYEVA, O.N.; CHERNYSHEV, Ye.A.; KAYUTENKO, L.A.; DOI DAYA, M.Ye.;
VOROB'YEVA, I.P.; POPOVA, E.A.; KLYACHKO, N.L.

Synthesis and test of the physiological activity of some compounds
of the kinin series. Fiziol. rast. 12 no.5:902-908 S-O '65.

(MIRA 19:1)

1. Institut fiziologii rasteniy imeni Timiryazeva AN SSSR, Moskva
i Institut organicheskoy khimii imeni Zelinskogo AN SSSR, Moskva.

KULAYEVA, T.M.

Material on the ecology of the eagle owl (Bubo bubo ruthenus Zhitkov
et Buturlin). Izv.Kazan.fil.AN SSSR.Ser.biol.i sel'khoz.nauk no.1:
197-206 '49. (MLRA 10:2)
(Tatar A.S.S.R.--Owls)

POPOV, V.A.; VORONOV, N.P.; KULAYEVA, T.M.

Studies of the ecology of shrews (Soricidae) of the Raifa Forest
(Tatar A.S.S.R.). Izv.Kazan.fil.AN SSSR.Ser.biol.i sel'khoz.nauk
no.2:173-208 '50. (MLRA 10:2)
(Raifa region--Shrews)

POPOV, V.A.; POPOV, Yu.K.; PRIYEZZHEV, G.P.; KULAYEVA, T.M.; VORONOV, N.P.;
GARANIN, V.I.; NAZAROVA, I.V.; IZOTOVA, T.Ye.; KRASOVSKAYA, L.A.

Results of studying the animal kingdom in the flood zone of the
Kuybyshev Hydroelectric Power Station. Trudy Kazan. fil. AN SSSR.
Ser. biol. nauk no.3:7-217 '54
(KUYBYSHEV RESERVOIR REGION--ZOOLOGY)
(WILD LIFE, CONSERVATION OF)

KULAYEVA, T. M.

KULAYEVA, T. M. -- "The Comparative Ecology of Red Voles of the Tatar
ASCR." Zoological Inst, Acad Sci USSR. Academic Council. Lenin-
grad, 1956.
(Dissertation for the Degree of Candidate in Biological Sciences).

SO: Knizhnaya Letopis', No 9, 1956

KULAZHENKO, A.

Our experience in the utilization of drained lands. Gidr.
i mel. 15 no. 9:30-33 S '63. (MIRA 17:1)

1. Predsedatel' kolkhoza imeni Kirova Pinskogo proizvodst-
vennogo upravleniya BSSR.

KULAZHENKO, A.

Brief news. Metallurg 5 no.2:22 F '60.

(Metallurgical plants)

(MIRA 13:5)

KULAZHENKO, Aleksey Nikolayevich[Kulazhenko, A.M.]; AREKHAU, V.I.
red.; ZEN'KO, M.M., tekhn. red.

[High potato yields in peat soils]Vysoki uradzhai bul'by na
tarfinikakh. Minsk, Dziarzh. vyd-va sel'skahaspadarchai lit-
ry BSSR, 1962. 11 p. (MIRA 15:11)

1. Starshina kolkhoza imeni Kirova Lagishinskogo rayona
Brestskoy oblasti (for Kulazhenko).
(Potatoes) (Peat soils)

KULAZHENKO, M.I.

Removal of five calcified formations from the central cranial fossa.
Vop.neirokhir. 19 no.3:54-55 My-Je '55. (MLRA 8:5)

1. Iz neyrokhirurgicheskoy kliniki Krymskogo meditsinskogo instituta imeni I.V.Stalina.

(BRAIN,diseases,

calcified tumors & non-tumoral form., surg.)

(BRAIN, neoplasms,

calcified, surg.)

(CALCIFICATION,

brain, tumoral & non-tumoral form., surg.)

KHERSONSKIY, G.R.; KULAZHENKO, M.I. (Odessa)

Clinical aspects, pathogenesis, and immediate and late results of operative treatment of cholesteatomas following tuberculous meningitis. Vrach. delo no.2:82-86 F'64
(MIRA 17:4)

1. Tuberkulezno-meningitnoye i neyrokhirurgicheskoye otdeleniye Odesskoy oblastnoy bol'nitsy i klinika nervnykh bolezney Odesskogo meditsinskogo instituta.

KULAZHENKO, M. I.; KHERSONSKIY, G. R. (Odessa)

Cholesteatomas in the area of the cauda equina following tuberculous meningitis. Vop. neirokhirurgii no.3:27-31 '62.
(MIRA 15:7)

1. Neyrokhirurgicheskoye i tuberkulezno-meningitnoye otdeleniye
(G. R. Khersonskiy) oblastnoy bol'nitsy i klinika nervnykh
bolezney Odesskogo meditsinskogo instituta.

(SPINAL CORD—TUMORS) (MENINGES—TUBERCULOSIS)

"APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R000927330001-6

KULAZHENKO, V.I. (Simferopol').

All-steel permanent dental prosthesis. Stomatologiya no.1:55-60
Ja-F '54.
(MILRA 7:1)
(Teeth, Artificial)

APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R000927330001-6"

KULAZHENKO, V.I., podpolkovnik meditsinskoy sluzhby

Primary osteoplasty of the mandible. Voen-med. zhur. no.1:74-76
Ja '56 (MIR 10:5)
(MANDIBLE surgery,
osteoplasty) (Eng)

KULAZHENKO, V.I., podpolkovnik meditsinskoy sluzhby

Intraosseous fixation of hollow bone fractures with acrylate-metal
rods. Voen.med.zhur. no.12:51-55 D '56. (MLRA 10:3)
(FRACTURES, surg.

intracosseous fixation of hollow bone fract. with acrylate-
metal rods)

"APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R000927330001-6

KULAZHENKO, V.I.

Using antibiotic aerosols in stomatology. Stomatologija
35 no.5:3~6 S-0 '56 (MIRA 10:4)
(ANTIBIOTICS) (STOMATOLOGY) (AEROSOLS)

APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R000927330001-6"

KULAZHENKO, V.I., podpolkovnik meditsinskoy sluzhby

Splint for treating fractures of the maxilla and bones of the nose.
Voen.-med.zhur. no.9:85-88 S '59. (MIRA 13:1)
(MAXILLA, fract. & disloc.)
(NOSE, fract. & disloc.)

KULAZHENKO, V.I. (Odessa)

Treatment of parodontosis with local negative pressure. Stomatologija
38 no.4:17-23 Jl-Ag '59. (MIRA 12:12)
(GUMS--DISEASES) (DENTAL INSTRUMENTS AND APPARATUS)

KULAZHENKO, V.I., podpolkovnik med.sluzhby

Primary and delayed replanting of teeth and roots. Vrach.delo
no.2:159-164 F '60.
(MIRA 13:6)

1. Okruzhnaya stomatologicheskaya poliklinika Odesskogo voyen-
nogo okruga.

(TEETH--TRANSPLANTATION)
(DENTAL INSTRUMENTS AND APPARATUS)

ARYAYEV, L.N., kand.med.nauk; KULAZHENKO, V.I. (Odessa)

Nitrogen oxide anesthesia at the stage of analgesia during stomatologic operations by means of a portable anesthetic apparatus.
Stomatologiya 40 no.4:39-42 J1-Ag '61. (MIRA 14:11)
(ANESTHESIA) (NITROGEN OXIDE) (STOMATOLOGY)

KULAZHENKO, V.I., kand.med.nauk

Visual devices for teaching orthopedic stomatology. Stomatologiya 42 no.2:76-78 Mr-Ap'63
(MIRA 17:3)

1. Iz kafedry ortopedicheskoy stomatologii (zaveduyushchiy
V.I.Kulazhenko) Odesskogo meditsinskogo instituta.

BABITS, K.K., KULAZHENKO, V.I.

Our efforts to control vibration. Bezop. truda v prom. 8
no.11:25-26 N '64. (MIRA 18/2)

1. Rudnik im. Dzerzhinskogo krivorozhskogo basseyna.

KULAZHENKO, V.E. (Minsk)

Viral influenza in fetuses and newborn infants. Arkh. pat.
no.11:12-18 '64.
(MIRA 18:11)

I. Kafedra patologicheskoy anatomi (zav. - prof. Yu.V.
Gul'kevich) Minskogo meditsinskogo instituta.

ACCESSION NR: AP4039700

S/0051/64/016/006/0936/0940

AUTHORS: Striganov, A. R.; Kulazhenkova, N. A.

TITLE: The isotopic shift in the spectrum of the singly ionized samarium atom

SOURCE: Optika i spektroskopiya, v. 16, no. 6, 1964, 936-940

TOPIC TAGS: samarium, atomic spectrum, isotopic shift, electron configuration, level transition, ionization phenomena

ABSTRACT: On the basis of earlier results by one of the authors (A. R. Striganov, V. A. Katulin, V. V. Yeliseyev, Opt. i spektr., v. 12, 171, 1962), which disclosed new interesting features in the isotopic shift of SmI, a more detailed measurement was made, with the aid of separated isotopes, of the isotopic shift between the components of even-even samarium isotopes on eight lines of SmII. The apparatus and the enriched samarium isotopes were the same as in the

Card 1/5

ACCESSION NR: AP4039700

earlier investigation. A hollow-cathode discharge tube was used as the light source. The relative isotopic shift was shown to be different on lines with positive and negative displacements. It was established that the isotopic shift in the levels of the electron configuration $4f^5 5d6s$ is double that for the $4f^6 6s$ levels, owing to peculiarities in the screening of the $6s$ -electrons. The electron configurations of 28 upper levels were obtained from the isotopic shift data. "The authors are grateful to student D. A. Volkov for participating in the measurements of several spectrograms." Orig. art. has: 2 figures and 2 tables.

ASSOCIATION: None

SUBMITTED: 04Apr63 DATE ACQ: 24Jun64 ENCL: 03

SUB CODE: NP NR REF. SOV: 003 OTHER: 007

Card 2/5

ACCESSION NR: AP4039700

ENCLOSURE: 01

$\lambda, \text{ Å}$	1 Переход	Энергия верхнего уровня, 2 cm^{-1}	3 Изотопическое смещение, 10^{-3} см^{-1}			
			$\Delta\nu$ (144—148)	$\Delta\nu$ (160—160)	$\Delta\nu$ (160—162)	$\Delta\nu$ (162—154)
4 Отрицательные сдвиги 4						
4424.34	$4/06s\alpha^6F_{1/2} - 4/06p56^0_{1/2}$	26506	81.4	52.2	65.3	33.8
4434.32	$4/06s\alpha^6F_{1/2} - 4/06p43^0_{1/2}$	25508	79.2	47.5	65.2	32.0
4519.63	$4/06s\alpha^6F_{1/2} - 4/06p56^0_{1/2}$	26506	96.7	55.0	77.2	40.6
5 Положительные сдвиги 5						
4403.36	$4/06s\alpha^6F_{1/2} - 4/05d6s20^0_{1/2}$	24222	78.7	50.2	75.7	28.4
4499.48	$4/06s\alpha^6F_{1/2} - 4/05d6s20^0_{1/2}$	24222	63.7	42.3	63.8	28.1
4505.05	$4/06s\alpha^6F_{1/2} - 4/05d6s19^0_{1/2}$	24104	104.8	65.9	95.8	45.4
4537.05	$4/06s\alpha^6F_{1/2} - 4/05d6s46^0_{1/2}$	24040	83.1	57.3	84.3	36.5
6569.31	$4/05d\alpha^6H_{11/2} - 4/05d6s75^0_{1/2}$	27203	186.0	114.5	162.8	84.7

Card 3/5

ACCESSION NR: AP4039700

ENCLOSURE: 02.

Isotopic shifts for
8 lines of SmII

- 1 - Transition
- 2 - upper level energy, cm^{-1}
- 3 - isotopic shift
- 4 - positive shifts
- 5 - negative shifts

Card 4/5

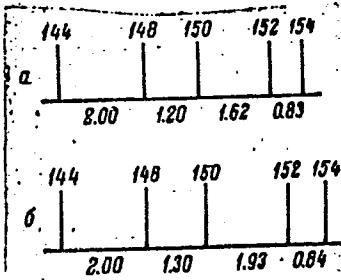
ACCESSION NR: AP4039700

Odd

Нечетные $4f^6 5d\ 6s$ 4 $4f^6 6p$ Even Четные $4f^6 5d$ 0 $^6P, ^3D, ^3F, ^1O, ^1H$ 40 $4f^6 6s$ $^6F, ^3F$ Level scheme of Sm^+ and isotopic level shift

Card 5/5

ENCLOSURE: 03



Relative isotopic shift.

a - lines with negative shift

b - lines with positive shift

"APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R000927330001-6

STRIGANOV, A.R.; KULAZHENKOVA, N.A.

Isotopic shift in the spectrum of the singly ionized samarium
atom. Opt. i spektr. 16 no.6:936-940 Je '64. (MIRA 17:9)

APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R000927330001-6"

NECHIPORENKO, Yu.D.; KULAZHKO, V.A.

Increased phagocytic activity of the leucocytes in carp under the
influence of levomycetin. Antibiotiki 7 no.1:50-52 Ja '62.
(MIRA 15:2)

1. Ukrainskiy nauchno-issledovatel'skiy institut rybnogo khozyaystva
Ukrainskoy akademii sel'skokhozyaystvennykh nauk
(LEVOMYCETIN) (PHAGOCYTOSIS)

OLSUF'YEV, N.G.; TSVETKOVA, Ye.M.; BORODIN, V.P.; KOROLEVA, A.P.; SIL'CHENKO, V.S.; KHOROSHEV, I.G.; MYASNIKOV, Yu.A.; PERFIL'YEVA, Z.A.; KRATOKHVL' N.I.; VAYSTIKH, M.A.; RAVDONIKAS, O.V.; BARANOVA, N.K.; ZIMINA, V.Ye.; TORMASOVA, L.N.; USTIN-PETROVA, T.F.; AREF'YEV, S.S.; KONKINA, N.S.; KUL'BA, A.P.; MAL'TSEVA, N.K.; SHELAPOVA, G.M.; SORINA, A.M.; BRA-NITSKAYA, V.S.; PRUDNIKOVA, M.N.

Tularin from a vaccinal strain for epicutaneous use. Zhur. mikro-biol.epid. i immun. 27 no.9:22-28 S '56. (MLRA 9:10)

1. Iz Instituta epidemiologii i mikrobiologii im. N.F.Gamelei AMN SSSR i protivotul'iaremiynykh stantsiy Stalingradskoy, Voronezhskoy, Tul'skoy, Plavskoy, Omskoy, Krasnodarskoy, Moskovskoy i Smolenskoy.
(TULAREMIA, diagnosis,
tularin epicutaneous test (Rus))

CH KUL'BA, F.Ya.

6

The stability of lead tetrachloride. P. Ya. Kul'ba
(Leningrad Technol. Inst.), *Zhur. Priklad. Khim.* (J. Applied Chem.) 23, 339-44 (1950).—Pure dry $PbCl_4$ is stable if kept at room temp., in the dark, under concd. H_2SO_4 , contg. 0.6% free SO_3 . At 100°, decompr. proceeds actively, but not instantaneously; there is no exchange reaction with H_2SO_4 . In soln. in CCl_4 , in sealed tubes, partial and irreversible decompr. was found after 5 hrs. at 105-8°. The soln. decomp. very rapidly in the presence of even traces of moisture; this can be most effectively removed by oleum. Introduction of Cl_2 does not improve the stability. Light causes rapid decompr.

Passage of dry SO_2 through the soln. at room temp. causes some turbidity owing to $PbCl_4 + SO_2 \rightleftharpoons PbCl_3 + SO_2Cl_2$, but that decompr. is fairly slow; it is very rapid at higher temp., and instantaneous in the presence of moisture. Passage of H_2S produces a ppt. of $PbCl_2$. Dry HCl produces no changes. With iodine, the reaction is, quantitatively, $PbCl_4 + I_2 \rightarrow PbCl_3 + 2ICl$. N. Thon

Kul'ba, F. Ya.

USSR/Chemistry - Heat of formation

Card 1/1 Pub. 151 - 2/37

Authors : Kul'ba, F. Ya.

Title : Thermal effect of reaction of $PbCl_2$ (cr) + Cl_2 (g) \leftrightarrow $PbCl_4$ (liq) and the standard heat of formation of $PbCl_4$ (liq).

Periodical : Zhur. ob. khim. 24/10, 1700-1710, Oct 1954

Abstract : The heats of reaction of $PbCl_4$ (liq) + J_2 (sol) \rightarrow $PbCl_2$ (cr) + $2JCl$ (sol) and J_2 (sol) + Cl_2 (g) \rightarrow $2JCl$ (sol), were investigated at standard conditions. The thermal effect of both reactions was established to be exothermal. The heat of formation of lead tetrachloride from crystalline lead chloride and gaseous chlorine, was established on the basis of experimental data. Also the standard heat of formation of $PbCl_4$ (liq) from simple substances was determined from the experimental data. The thermal effect of a solution of lead tetrachloride in carbon tetrachloride is explained. Six references: 5-USSR and 1-USA (1922-1954). Tables; drawings.

Institution : The Lensoviet Technological Institute, Leningrad

Submitted : April 10, 1954

AUTHOR: Kul'ba, F.Ya and Mironov, V.E. 556

TITLE: Thallium Triiodide and other products of the iodination of Thallium Iodide. (Triiodid Talliya i Drugie Produkty Iodirovaniya Talloiodida).

PERIODICAL: "Zhurnal Neorganicheskoy Khimii" (Journal of Inorganic Chemistry) Vol.II, No.2, pp.244-252, 1957. (U.S.S.R.)

ABSTRACT: The aim of this work was to study the iodination of TlI, to check methods of separating thallium triiodide, to determine its structure and to explore the possibility of the existence of higher polyiodides of thallium. It has been shown that in the iodination of TlI in CH₃OH to TlI₃, the only intermediate product is a compound which has the simplest formula Tl₃I₄. Thallium penta-iodide has been isolated and a method for its synthesis found. This is the highest iodide produced by iodination of TlI in CH₃OH. Drying of polyiodides was best carried out at room temperature in air to constant loss of weight in unit time. It has been shown that TlI₃ exists in alcoholic solution in a state of tautomeric equilibrium, and that crystals of thallium triiodide are Tl₃[I₂I]. The compounds TlI₃.C₄H₈O₂ and KI₃.C₄H₈O₂ have been isolated for the first time. It has been shown that in the formation of CI₃ in aqueous solutions and TlI₃ in alcoholic solutions complete isotopic exchange between ions and molecular-iodine atoms takes place in 8-10 minutes. Complete isotopic exchange was also found in the

Card 1/2

556

Thallium Triiodide and Other Products of the Iodination of
Thallium Iodide (cont.)

Polyiodides TlI_3 , TlI_5 and KI_5 , the preparation of which by the
iodination of TlI and KI by gaseous iodine took place over
12-14 hours.

There are 16 references of which 4 are Russian.

Received 26th September, 1956.

Card 2/2

KUL'BA, F.Ya.; MIRONOV, V.Ye.

Equilibriums in thallium iodide solutions. Zhur. neorg. khim. 2 no.8:
1741-1747 Ag '57. (MIRA 11:3)

1. Leningradskiy tekhnologicheskiy institut im. Lensoveta.
(Thallium iodide) (Tautomerism)

"APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R000927330001-6

Equilibria in solutions of thallium iodide. F. Ya.
Kul'ba and V. E. Mironov [Lenzovet Technol. Inst., Lenin-
grad, USSR. Russ. Chem. J. 1971, 17, 1111-1114]

1/1 Misra 10/11

APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R000927330001-6"

KUL'BA, F.Ya.; MIRONOV, V.Ye.

Formation of univalent thallium in solutions of complex iodides.
Report No.1. Zhur. neorg. khim. 2 no.12:2734-2740 D '57.(MIRA 11:2)

1. Leningradskiy tekhnologicheskiy institut im. Lensoveta..
(Thallium) (Solubility) (Iodides)

SOV/78-3-8-22/48

AUTHORS: Kul'ba, F. Ya., Mironov, V. Ye., Lyalin, O. O.

TITLE: On the Formation of Complex Bromides of Monovalent Thallium
(Ob obrazovanii kompleksnykh bromidov odnovalentnogo talliya)

PERIODICAL: Zhurnal neorganicheskoy khimii, 1958, Vol. 3, Nr 8, pp. 1851-
1854 (USSR)

ABSTRACT: The solubility of thallium-(I)-bromide in solutions of bromides of lithium, sodium, potassium and cesium in different concentrations (0,2 - 7,0 N) were determined at 25°C. The solubility of the thallium-(I)-bromide in solutions of sodium bromide at constant ionic degree was determined. The following compounds were isolated with cesium bromide and then analyzed: $CsTlBr_2$, and $CsTlBr_3$. The stability constant of the complex ions $TlBr$, $TlBr_2^-$, $TlBr_3^{2-}$, $TlBr_4^{3-}$ was determined in $LiBr$, $NaBr$, KBr and $CsBr$. In lithium bromide the stability constant for $TlBr = 0,09$, for $TlBr_2^- = 0,17$, for $TlBr_3^{2-} = 0,85$, in sodium bromide solutions for $TlBr = 0,12$, for $TlBr_2^- = 0,16$; in potassium bromide

Card 1/2

On the Formation of Complex Bromides of Monovalent Thallium

SOV/73-3-8-22/48

solutions for $TlBr = 0,12$, for $TlBr_2^- = 0,12$, for $TlBr_3^{2-} = 0,40$;
in cesium bromide solutions for $TlBr = 0,09$, for $TlBr_2^- = 0,10$,
for $TlBr_3^{2-} = 0,23$.

The different solubility of the thallium-(I)-bromide in concentrated solutions of the bromides of sodium, potassium and cesium is due to the different tendency to form complexes.
There are 3 tables and 6 references, 6 of which are Soviet.

ASSOCIATION: Leningradskiy tekhnologicheskiy institut im. Lensoveta (Leningrad Technological Institute imeni Lensoveta)

SUBMITTED: July 8, 1957

Card 2/2

AUTHORS: Kul'ba, F. Ya., Mironov, V. Ye. SOV/78-3-11-10/23

TITLE: III. On the Formation of the Complex Iodides of Univalent Thallium in Solutions (III. Ob obrazovanii v rastvorakh kompleksnykh yodidov odnovalentnogo talliya)

PERIODICAL: Zhurnal neorganicheskoy khimii, 1958, Vol 5, Nr 11, pp 2480 - 2486 (USSR)

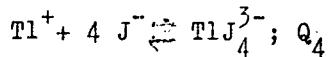
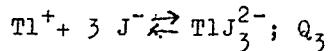
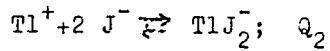
ABSTRACT: The composition and the stability constant of the complexes of the thallium iodides formed in solution were investigated. The solubility of thallium was determined in solutions of potassium iodide at temperatures of 20, 30, 40, 50, 60 and 70°C and was compiled in the tables 1,2,3,4,5, and 6. The solubility of thallium iodide in solutions of magnesium iodide and barium iodide was as well investigated at 25°C. The results show that the solubility of thallium iodide in potassium iodide rises considerably under the formation of complexes with an increase in temperature from 20 to 70°C. The stability of the complexes of the thallium iodides is reduced with an increase in temperature. The

Card 1/3

III. On the Formation of the Complex Iodides of
Univalent Thallium in Solutions

S01/78-3-11-10/23

formation of complex iodides proceeds according to
the following reactions:



Q_2 , Q_3 , and Q_4 denote the formation heat of the thallium
iodide complexes. The orienting values of the formation
heat of the thallium iodide complexes were calculated
and given in table 1. The results obtained show that
the formation heat increases with an increase in
temperature. The solubility products were determined
at temperatures of 20, 30, 40, 50, 60 and 70°C. The
difference in the stability of the complexes of thallium
(I) iodide in the solutions of various metal iodides is
caused by the influence of the complex formers on the

Card 2/3

III. On the Formation of the Complex Iodides of
Univalent Thallium in Solutions

SP7/78-3-11-16/23

inner sphere of the cations in the solutions. In the
inner sphere of the complexes the cations compete with
the thallium ions for the binding of iodine ions. There
are 12 tables and 2 references, 1 of which is Soviet.

ASSOCIATION: Leningradskiy tekhnologicheskiy institut im.Lensoveta
(Leningrad Institute of Technology imeni Lensovet)

SUBMITTED: October 2, 1957

Card 3/3

5(4)
AUTHORS:

Kul'ba, F. Ya., Mironov, V. Ye.

SCV/78-4-4-9/44

TITLE:

Complex Compounds of Trivalent Thallium With 2-2'-Dipyridyl
(Kompleksnyye soyedineniya trekhvalentnogo talliya s 2-2'-di-
piridilom)PERIODICAL: Zhurnal neorganicheskoy khimii, 1959, Vol 4, Nr 4, pp 761-763
(USSR)

ABSTRACT:

The complex compounds of thallium nitrate with two and three molecules of 2-2'-dipyridyl were prepared as colorless, easily soluble salts. The solubility of the first compound in water at 25° is 0.09±0.01 mol/l. The molecular electric conductivity of the first compound at pH 3.5 is 382 ohm⁻¹, while that of the complex thallium compound with three molecules of 2-2'-dipyridyl is 378 ohm⁻¹. The electric conductivity in aqueous solution shows that the compounds dissociate into 4 ions and have the structures $[TlDp_2](NO_3)_3$ and $[TlDp_3](NO_3)_3$. To determine the stability of the complex ion $TlDp_3^{3+}$ the redox potential was investigated. The general stability constant of the $TlDp_3^{3+}$ ion was determined using the

Card 1/3

Complex Compounds of Trivalent Thallium With
2-2'-Dipyridyl

SOV/78-4-4-9/44

$$\text{following equation: } K_{\text{TlDp}_3^{3+}} = \frac{[\text{Tl}^{3+}][\text{Dp}]^3}{[\text{TlDp}_3^{3+}]} = (5 \pm 2.5) \cdot 10^{-26}.$$

The synthesis of the complex compound with 3 molecules of 2-2'-dipyridyl was carried out by dissolving $[\text{TlDp}](\text{NO}_3)_3$ in a solution of 2-2'-dipyridyl. Finally, the compound formed was precipitated with a saturated solution of 2-2'-dipyridyl in diethyl ether. The yield with this method is 85-95 %. The nature of the exchange of $[\text{TlDp}_2](\text{NO}_3)_3$ with potassium halides and sodium perchlorate was investigated. The experiments show that potassium chloride and sodium perchlorate cause the $[\text{TlDp}_2](\text{NO}_3)_3$ to precipitate as the complex compounds $[\text{TlDp}_2](\text{ClO}_4)_3$ and TlDp_2Cl_3 . Potassium bromide causes $[\text{TlDp}_2](\text{NO}_3)_3$ to form the complexes TlDp_2Br_3 and TlDpBr_3 . Potassium iodide causes the complex $[\text{TlDp}_2]\text{J}$ to form. A table gives the compositions of the solutions whose redox potentials were investigated.

Card 2/3

Complex Compounds of Trivalent Thallium With
2-2'-Dipyridyl

SOV/78-4-4-9/44

There are 1 table and 5 references, 1 of which is Soviet.

ASSOCIATION: Leningradskiy tekhnologicheskiy institut im. Lensoveta
(Leningrad Technological Institute imeni Lensovet), Kafedra
neorganicheskoy khimii (Chair of Inorganic Chemistry)

SUBMITTED: January 15, 1958

Card 3/3

5(2)

SOV/78-4-6-30/44

AUTHORS: Kul'ba, F. Ya., Mironov, V. Ye.

TITLE: Complex Compounds of Trivalent Thallium With 1-10-Phenanthroline (Kompleksnyye soyedineniya trekhvalentnogo talliya s 1-10-fenantrolinom)

PERIODICAL: Zhurnal neorganicheskoy khimii, 1959, Vol 4, Nr 6, pp 1393 - 1397 (USSR)

ABSTRACT: 13 complex compounds of thallium with 1-10-phenanthroline and one complex with 2-2-dipyridil were isolated and the products analyzed. The analysis results of these compounds are summarized in table 1. In the case of an interaction between the aqueous solution $TlPh_n^{(NO_3)_3}$ ($n=2$ or 3) and a potassium iodide solution it was found that one iodine ion displaces one or two molecules 1-10-phenanthroline and precipitates a compound of the composition $[TlPhJ_2]J$. The solubility of $TlPhJ_3$ in water, alcohol, and especially in aqueous solution of potassium iodide is low. The solubility amounts in water at 25° to $3 \cdot 10^{-5}$ mol/l and in alcohol to 10^{-4} mol/l. $TlPhJ_3$

Card 1/2

Complex Compounds of Trivalent Thallium With
1-10-Phenanthroline

sov/78-4-6-30/44

can be used for the quantitative determination of thallium. The electric conductivity of the following thallium aminates was carried out in aqueous solutions: $[TlPh_2](NO_3)_3$, $[TlPh_3](NO_3)_3$, $[TlPh_2Cl_2]NO_3$, $[TlPh_2Cl_2]NO_3$, $[TlPh_2Cl_2]NO_3$, $[TlDp_2Cl_2]NO_3$, $[TlDp_2Cl_2]NO_3$, $[TlDp_2Cl_2]NO_3$. The results are given in table 3. There are 3 tables and 4 references, 3 of which are Soviet.

ASSOCIATION: Leningradskiy tekhnologicheskiy institut im. Lensoveta (Leningrad Technological Institute imeni Lensovet) Kafedra neorganicheskoy khimii (Chair of Inorganic Chemistry)

SUBMITTED: March 1, 1958

Card 2/2

68223

5.2620

5(2)
AUTHORS: Kul'ba, F. Ya., Mironov, V. Ye.

S/078/60/005/02/009/045
B001/B016

TITLE: The Influence Exercised by the Cations of Alkali Metals Upon
Composition and Stability of the Ions $[Tl(CNS)_n]^{1-n}$

PERIODICAL: Zhurnal neorganicheskoy khimii, 1960, Vol 5, Nr 2, pp 287-291
(USSR)

ABSTRACT: The authors investigated the solubility of Tl halides in concentrated solutions of halides of alkali- and alkaline-earth metals, in previous papers (Refs 1-4), and found a considerable influence of the nature of the cation upon the solubility. They denoted this phenomenon as the influence of the cation of the outer sphere, and established the order of the alkali- and alkaline-earth cations, in which stability and coordination number of the complex compounds $TlHal^{1-n}$ increase. In the present paper, the same phenomena were investigated in thallium thiocyanates in solutions of Li-, Na-, K-, and Cs-thiocyanate at 25° and concentrations of 0.1 - 9.69 N. In dilute solutions of alkali thiocyanate, the solubility of TlCNS decreases in the order $CsCNS > KCNS > NaCNS > LiCNS$, reaches a minimum at $N \sim 0.5$,

Card 1/3

68223

The Influence Exercised by the Cations of Alkali Metals Upon Composition and Stability of the Ions
S/078/60/005/02/009/045
B004/B016

$[Tl(CNS)_n]^{1-n}$

and increases rapidly with increasing concentration of the alkali thiocyanate. In this connection, a reversal of the effect of the alkali thiocyanates occurs since in the range of 5 - 8 N the solubility of TlCNS in LiCNS is highest, and decreases in the order: LiCNS, NaCNS, KCNS, CsCNS. The influence exercised by the cation of the outer sphere upon the complex formation cannot be explained merely by the change in the activity coefficient. In table 2, the solubility of TlCNS in 1 - 8 N NaCNS at constant ionic strength 8 is given, and the specific influence of the ions ClO_4^- and NO_3^- used for the maintenance of the ionic strength is outlined. Table 3 gives the calculated instability constants. On the strength of own experiments and data in publications, table 4 presents the instability constants of the complexes TlA_n^{1-n} in the presence of Na as the cation of the outer sphere ($A = CN^-, F^-, Cl^-, Br^-, J^-, CNS^-, \frac{1}{2}S_2O_3^{2-}$). The stability of the complex compounds increases in the order $F^- < CN^- < Cl^- < Br^- < CNS^- < J^- < \frac{1}{2}S_2O_3^{2-}$. 4

Card 2/3

68223

The Influence Exercised by the Cations of Alkali Metals Upon Composition and Stability of the Ions [Tl(CNS)_n]¹⁻ⁿ

S/078/60/005/02/009/045
B004/B016

In the tables 5-7, the instability constants K^V at varying ionic strength and K^{st} at constant ionic strength for the ions $[Tl(CNS)_n]^{1-n}$, $TlBr_n^{1-n}$, and TlJ_n^{1-n} are compared with one another where the relation is defined by the equation:

$K^{st} = K^V \cdot C_n$. C_n is found to have the constant value of 4.1±0.2, irrespective of the nature of the anion. There are 7 tables and 10 references, 8 of which are Soviet.

ASSOCIATION: Leningradskiy tekhnologicheskiy institut im. Lensoveta Kafedra neorganicheskoy khimii (Leningrad Technological Institute imeni Lensovet, Chair of Inorganic Chemistry)

SUBMITTED: September 26, 1958

Card 5/3

KUL'BA, F.Ya.; MIRONOV, V.Ye.

Effect of alkali metal cations on the composition and stability
of $[Tl(CNS)_n]^{1-n}$ ions. Zhur.neorg.khim. 5 no.2:287-291
F '60. (MIRA 13:6)

1. Leningradskiy tekhnologicheskiy institut imeni Lensoveta
Kafedra neorganicheskoy khimii.
(Thallium compounds) (Alkali metals)

KUL'BA, F.Ya.; MIRONOV, V.Ye.

Stability of the ions $TlBr_n^{1-n}$ and TlI_n^{1-n} . Zhur. neorg. khim.
5 no.8;1898-1899 Ag '60. (MIRA 13:9)

1. Leningradskiy tekhnologicheskiy institut im. Lensoveta,
Kafedra neorganicheskoy khimii.
(Thallium bromide) (Thallium iodide)

KUL'BA, F. Ya.; MAKASHEV, Yu.A.; MIRONOV, V. Ye.

Complex formation of trivalent thallium with 1,10-phenanthroline and 2,2'-dipryidyl. Zhur. neorg. khim. 6 no.3:630-635 Mr '61. (MIRA 14:3)

1. Leningradskiy tekhnologicheskiy institut imeni Lensoveta.
(Thallium compounds) (Bipyridine)
(Phenathroline)

KUL'BA, F.Ya.; MAKASHEV, Yu.A.; MIRONOV, V.Ye.

New complex aminates of trivalent thallium. Zhur.neorg.khim. 6
no.6:1481-1483 Je '61.
(MIRA 14:11)

1. Leningradskiy tekhnologicheskiy institut im. Lensoveta,
Kafedra neorganicheskoy khimii.
(Thallium compounds)

KUL'BA, F.Ya.; MIRONOV, V.Ye.; FEDOROV, V.A.

Complex formation of monovalent thallium with alkali metal chlorides. Zhur. neorg. khim. 6 no.7:1586-1591 J1 '61.

(MIRA 14:7)

1. Leningradskiy tekhnologicheskiy institut imeni Lensoveta,
kafedra obshchey khimii.

(Thallium compounds) (Alkali metal chlorides)

KUL'BA, F.Ya.; MIRONOV, V.Ye.; KHVOSTOVA, L.B.

Principle of additivity and the series of cationic effect.
Zhur.neorg.khim. 6 no.8:1861-1864 Ag '61. (MIRA 14:8)

1. Leningradskiy tekhnologicheskiy institut imeni Lensoveta, kafedra
obshchey khimii.
(Complex compounds) (Ions)

KUL'BA, F.Ya.; MIRONOV, V.Ye.; TROITSKAYA, G.S.; MAKSIMOVA, N.G.

Complexing of bivalent lead with sodium bromide. Zhur.neorg.khim.
6 no.8:1865-1867 Ag '61. (MIRA 14:8)

1. Leningradskiy tekhnologicheskiy Institut imeni Lensoveta kafedra
obshchey khimii.
(Lead compounds) (Sodium bromide)

KUL'BA, F.Ya.; MIRONOV, V.Ye.; PAVLOV, V.N.

Effect of alkali metal cations on the formation in solutions of hydroxy complexes of bivalent lead. Zhur.neorg.khim. 6 no.12:
2814-2815 D '61. (MIRA 14:12)
(Lead compounds) (Alkali metals)

KUL'BA, F.Ya.; MAKASHEV, Yu.A.; GULLER, B.D.; KISELEV, G.V.

Study of complex formation between thallium (III) and
1, 10-phenanthroline and 2, 2'-bipyridine by the extraction method.
Zhur.neorg.khim. 7 no.3:689-690 Mr '62. (MIRA 15:3)

1. Leningradskiy tekhnologicheskij institut imeni Lensoveta,
kafedra neorganicheskoy khimii.
(Thallium compounds) (Phenanthroline) (Bipyridine)

KUL'BA, F.Ya.; MAKASHEV, Yu.A.

Thermochemistry of the complex formation of thallium (III) with
2,2'-dipyridyl and 1,10-phenanthroline in aqueous solutions.
Zhur.neorg.khim. 7 no.6:1280-1284 Je '62. (MIRA 15:6)

1. Leningradskiy tekhnologicheskiy institut imeni Lensoveta,
kafedra neorganicheskoy khimii.
(Thallium compounds) (Bipyridine) (Phenanthroline)

KUL'BA, F.Ya; MAKASHEV, Yu.A.

Calorimetric measurement of the heats of neutralization of 1,10-phenanthroline and 2,2'-dipyridyl in aqueous solutions. Zhur. ob. khim. 32 no. 6:1724-1727 Je '62. (MIRA 15:6)
(Phenanthroline) (Bipyridine) (Heat of neutralization)

KUL'BA, F.Ya.; MAKASHEV, Yu.A.

Data on the thermochemistry of thallium (III) complex formation.
Zhur.prikl.khim. 35 no.3:663-664 Mr '62. (MIRA 15:4)

1. Leningradskiy tekhnologicheskiy institut imeni Lensoveta.
(Thallium compounds) (Thermochemistry)

KUL'BA, F.Ya.; CHERNOVA, N.N.

Study of thiocyanate complexes of thallium in aqueous and water-methanol
solutions. Zhur.neorg.khim. 7 no.7:1595-1600 Jl '62. (MIRA 16:3)

1. Leningradskiy tekhnologicheskiy institut imeni Lensoveta,
kafedra obshchey khimii.

(Thallium compounds) (Thiocyanates)

KUL'BA, P.Ya.; CHERNOVA, N.N.

Thiocyanate complexes of monovalent thallium in water-ethanol,
water-propanol, and water-isopropanol solutions. Zhur. neorg.
khim., 7 no.3:1902-1907 Ag '62. (MIRA 1616)

1. Leningradskiy tekhnologicheskiy institut imeni Lensoveta,
kafedra obshchey khimii.
(Thallium compounds) (Thiocyanates)

KUL'BA, F.Ya.; MIRONOV, V.Ye.; ROZHANOVSKAYA, L.P.

New compounds of trivalent thallium halides with 3,3'- and
4,4'-dipyridyl. Zhur.neorg.khim. 7 no.10:2320-2322 01/62.
(MIRA 15:10)

1. Leningradskiy tekhnologicheskiy institut imeni Lensoveta,
kafedra obshchey khimii.
(Thallium compounds) (B:pyridine)

FEDOROV, V.A.; MIRONOV, V.Ye.; KUL'BA, F.Ya.

Luteo chloride associated compounds. Zhur.neorg.khim.
7 no.11:2528-2533 N '62. (MIRA 15:12)
(Cobalt compounds)
(Coordination compounds)